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ABSTRACT

A study sought to determine whether the perception of sex bias influences a woman's decision to teach vocational agriculture. Separate questionnaires were administered to female secondary vocational agriculture students, female university students enrolled in agricultural education, and female vocational agriculture teachers. Each of the questionnaires dealt with perceptions of sex bias and with the desirability of agricultural education as a career. Among the findings of the study was that with respect to their perception of sex bias, in response to the statement concerning community acceptance, 72.3 percent of the secondary students agreed that the community would accept a woman vocational agriculture teacher. Similarly, 61.1 percent agreed that a woman vocational agriculture teacher would get along well with her class, while 58.7 percent either disagreed or strongly disagreed that students in vocational agriculture would not accept a woman teacher. On a question concerning desire to teach, 59.6 percent of the female university students agreed that they would consider teaching production agriculture. A total of 48.7 percent did not feel it would be difficult to find a job teaching production agriculture because of their sex. A majority of the female teachers surveyed (70%) did not agree that administrators were reluctant to hire a female vocational agriculture teacher. (LRA)

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RELATIONSHIP OF PERCEIVED SEX BIAS AND THE DECISION OF WOMEN TO TEACH PRODUCTION AGRICULTURE

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Purpose and Objectives

Supported by Title IX in 1972 and the Education Amendments relating to vocational education passed in 1976, as well as affirmative action programs, women are now considering occupations that have traditionally been male-intensive. Agriculture is one of many non-traditional areas in which women have taken an interest in recent years (Reynolds and Walker, 1975). However, women still represent a very small minority of the teachers of production agriculture. In Ohio, 2.5% of the production agriculture instructors are women (Directory, 1979), while nationally the figure is 2.6% (Moore, 1978). At the same time there has been an increasing shortage of vocational agriculture teachers both in Ohio and in many other states (Luft and Bender, 1974; Craig, 1975).

There are several factors which enter into a person's career choice. Knotts (1975) speculates that prevailing social attitudes, sex-stereotyped counseling, early conditioning and institutional policies have all contributed to the low enrollment of females in agricultural education.

This study attempted to measure the significance of the perception of sex bias as it relates to the limited participation of women in the agricultural teaching field. Specifically the researcher sought to determine whether the perception of sex bias influences a woman's decision to teach vocational agriculture.

Research objectives were as follows:

1. to determine the significance of sex bias as a factor in the career choice of potential female agriculture teachers.
2. to find the relationship between the perception of sex bias and the job satisfaction of current female teachers of production agriculture.
3. to identify specific areas in which women students and teachers of vocational agriculture perceive sex bias.

Procedure

An extensive review of related literature was conducted to ascertain present knowledge and awareness of sex bias as well as the role of female vocational instructors in non-traditional programs, particularly production agriculture.

The population for this study was divided into three groups. The investigator was interested in the perception of sex bias at several levels of the educational continuum; the female secondary vocational agriculture student, the female university student enrolled in agricultural education and the female vocational agriculture teacher. Three separate questionnaires were designed specifically for this study to be sent to each group. Seventy-two production agriculture programs were randomly selected, from which 100% of the female students were asked to return the questionnaire. For females enrolled in agricultural education at the university level and female production agriculture teachers, the populations of those groups constituted the samples for the study, for a total of forty-five agricultural education students and eleven female teachers.

Questionnaires for all three groups were comprised of a series of attitude statements to be measured by a Likert-type scale. Questions dealt with perceptions of sex bias among significant others and with the desirability of agricultural education as a career. In analyzing the data, questions were grouped based on similar content, to derive a perceived sex bias score which was then correlated with the response to the question concerning desire to teach production agriculture. In the case of females currently teaching, responses to questions concerning job satisfaction were correlated with this perceived sex bias score. Further, an attempt was made to isolate specific groups perceived to be sex biased by the female teachers.

Findings

Findings of the study are summarized according to the three groups: female secondary students of vocational agriculture, female students in agricultural education at the university level and female teachers of production agriculture. All three groups were examined to determine whether any differences exist among females at these three levels of the educational continuum.

Attitude statements on the survey to female secondary students can be generally categorized into two groups: statements concerning their perception of sex bias and statements concerning their perception of the roles and responsibilities of a vocational agriculture instructor. With respect to their perception of sex bias, in response to the statement concerning community acceptance, 72.3% agreed that the community would accept a woman vo-ag teacher. Similarly, 61.1% agreed that a woman vo-ag teacher would get along well with their vo-ag class, while 58.7% either disagreed or strongly disagreed that students in vo-ag would not accept a woman agriculture teacher. Responses to these three statements were grouped and a mean score derived and correlated with the response to the statement concerning desire to teach. Pearson's correlation coefficient was calculated at $-.18$ ($p < .05$). Students who perceived greater sex bias had less desire to teach.

In analyzing their perception of the roles and responsibilities of an agriculture teacher, a majority, or 57.1% of the female secondary students felt that teaching vo-ag would be a hard job, however 40.8% agreed they would consider teaching vo-ag. A large group of students, specifically 36.6% were undecided on the issue of teaching production agriculture. The female secondary students generally responded positively to questions concerning specific activities of a vo-ag teacher, for example 67.7% agreed they would

enjoy advising an FFA chapter, 78% agreed they would like to make home visits, while 78.8% agreed they would enjoy working with adult farmers. A smaller percentage or 40.6% agreed they would enjoy teaching shop.

The second group of students to be analyzed were female students in agricultural education at the university level. Of the fifteen students who responded that they had high school vo-ag experience, 73.3% felt they had not been treated unfairly in high school vocational agriculture class. Also, 86.6% disagreed with the statement that their teacher had "not liked the idea of having girls in vo-ag". Similarly, 73.3% did not agree that students in their high school vo-ag class had a hard time accepting girls in vo-ag. An even larger majority, 75.7% did not agree that they were treated unfairly at work.

Concerning the experience of the female agricultural education students upon entering the university, 67.5% disagreed that instructors frequently make sexist remarks. Most students (66.7%) also disagreed with the statement "OSU instructors do not take my interest in agriculture seriously because I am female". A similar number (64.2%) felt that other students in college classes are very accepting of women in agriculture.

On the question concerning desire to teach, 59.6% agreed that they would consider teaching production agriculture. A total of 48.7% did not feel it would be difficult to find a job teaching production agriculture because of their sex. However, 19.5% of the of the students were undecided on that statement. Approximately 61% felt that school boards would hire a female vo-ag teacher, but again 34.1% were undecided. A larger percentage (45.2%) were undecided about whether students in vocational agriculture would prefer a male teacher. There were 38.1% undecided on the statement "parents would have a difficult time accepting a female agriculture teacher", and more

students (38.1%) agreed with the statement than disagreed (23.8%). Finally female agricultural education students were largely undecided (41.5%) about whether most communities would welcome a female ag teacher as much as a male. The same number of students agreed as disagreed with the statement (29.3%).

The researcher was interested in the relationship between the perception of sex bias among female students in agricultural education and their desire to teach vocational agriculture. In order to determine the overall perception of sex bias, the questions related to the perception of sex bias were grouped and an average score was calculated. The mean response for these questions was correlated with the mean response to the question concerning the desire to teach production agriculture. Pearson's correlation coefficient was equal to -.29 at the .05 level of significance. At high levels of perception of sex bias there was less desire to teach.

At the end of the questionnaire, students were asked to comment briefly on how they would explain why few women choose to teach production agriculture. Of the 42 respondents, half of the female university level students cited sex bias and stereotyping as the reason for the low participation of women in the agricultural teaching field. Those responses included:

> ..."Few women choose to teach because it's such a hassle. Even with a farm background, my advisors tell me it is an all male field and I don't have much of a chance"...
>
> ..."Every first-year mistake would be said to be a sexually related one"...
>
> ..."Few women choose to teach production agriculture because it is a traditionally male profession"...
>
> ..."fear of non-acceptance by students and community and pressure from male-oriented profession"...
>
> ..."I feel that there are so few female production agriculture teachers because of a lack of support from parents, school boards, some college instructors, and the community in general"...
>
> ..."Women are scared off by the prospect of overcoming the sex-stereotypes"...

Seven respondents (16.6%) specifically mentioned that a weak background in technical areas causes women to feel less competent than their male counterparts. Selected comments include:

> ..."Many women don't get a chance to experience the everyday problems of farming"...
>
> ..."Probably some feel their background and experience is not strong enough as a male's"...
>
> ..."they don't have enough technical skills in areas such as mechanics, shop"...
>
> ..."Many realize the strong technical background which is necessary to successfully teach ag"...

Ten of the respondents (23.8%) mentioned both sex bias and a lack of technical background as reasons why few women choose to teach production agriculture. The remaining students either did not respond or mentioned the attractiveness of agricultural industry to women graduates as an influence in their decision not to teach.

Female production agriculture teachers were the third group surveyed. Sixty percent of the female teachers agreed that they are happy in their present position while 80% would encourage other women to enter the profession. Many of the teachers (60%) disagreed that their students would rather have a male teacher. Forty percent agreed that other teachers have a hard time accepting a female vo-ag teacher while 60% disagreed. On the statement concerning equal respect from other teachers, 55.5% agreed that they were treated equally and 44.4% disagreed.

A majority of the women (70%) did not agree that administrators were reluctant to hire a female vo-ag teacher. An even larger percentage (90%) disagreed with the statement: "I do not receive adequate support from administrators because I am female". Eighty percent of the female teachers did not

agree that parents were unhappy with a woman teaching vocational agriculture. Likewise, 80% agreed that parents have been very accepting of a woman vo-ag instructor.

In terms of their perception of sex bias among employers, 70% of the teachers did not feel that employers resist working with a female instructor. Similarly, 60% disagreed that employers do not take them as seriously as a male teacher.

Fifty percent of the female production agriculture teachers agreed that they really enjoy their work with adult farmers. (For the other five respondents the statement was not applicable). Ninety percent "feel quite comfortable in making home visits" while 70% "enjoy teaching shop". As FFA advisors, 70% of the teachers agreed that they encountered few problems in that capacity.

For females currently teaching, the researcher was interested in job satisfaction, rather than desire to teach, as it relates to the perception of sex bias. Statements related to job satisfaction were grouped, a mean score derived and correlated with the mean response to the questions concerning the perception of sex bias. Pearson's correlation coefficient was found to be $-.80$ ($p < .05$). Further, job satisfaction was correlated with the perception of sex bias among specific groups, ie. employers of students, parents, teachers, administrators and students. The strongest correlation was found between the perception of sex bias among parents and job satisfaction with $r=-.90$ ($p < .05$). Job satisfaction was also highly related to the perception of sex bias among employers ($r=-.65$, $p < .05$). The perception of sex bias among other groups did not show significant correlations to job satisfaction.

The second page of the questionnaire sent to female production agriculture teachers listed five questions to which they were asked to respond briefly. The first question dealt with the respondent's perception of the most important factor in the community acceptance of a female production agriculture teacher. Seventy percent of the female teachers mentioned attitude, specifically a positive effort to get to know people in the community. Thirty percent stated that technical competence or the "ability to do the job" is the major factor in community acceptance.

When asked what factors have contributed to the low percentage of women teaching production agriculture, fifty percent cited career counseling and a general lack of encouragement from teachers and counselors as a reason for the limited participation of women in agricultural education. The teachers also referred to competition from industry, lack of acceptance in the community and lack of farming experience as factors contributing to the low representation of females in the profession.

Changes needed to encourage more women to enter agricultural teaching as indicated by female vo-ag teachers, included: a better acceptance on the part of administrators and state staff, more career education at both the high school and college levels and an increase in salary.

Seventy percent of the women believed that the perception of sex bias is a deterrent to females who might otherwise teach production agriculture. Several respondents mentioned that although the perception of sex bias might be a deterrent, it may not necessarily be an accurate assessment of the situation. For example, comments were:

> ..."if they have the help and support of the administration and do a good job...sex bias is not a problem"...
>
> ..."the problem isn't as great as the professors feel it is"...
>
> ..."not a deterrent if they are strong people and capable of being a good teacher"...

Other teachers agreed that the perception of sex bias is realistic. Statements included:

> ..."Many cannot accept the bias that goes with the job. It can become an added problem that men do not have to deal with"...
>
> ..."Older teachers feel threatened especially when a female is successful"...
>
> ..."In my community, I'm still the talk of the town because I am female. It's hard to feel comfortable in a town knowing that you're being talked about"...
>
> ..."What surprised me the most is when a state staff member was amazed that a girl could do all the same things as a man. I would hope they would be more educated as to the ability of women"...

Finally, teachers were asked why they are teaching vocational agriculture. Sixty per cent of the respondents stated that they enjoy working with students. Fifty per cent cited genuine interest in agriculture. Other reasons mentioned include: the challenge of a male-intensive field, the independence associated with teaching and the variety in subjects and students in vocational agriculture.

Conclusions

Based upon the statistical findings and anecdotal data collected, the following conclusions are drawn.

1) The decision of female secondary students of vocational agriculture to consider a career in teaching production agriculture may be influenced by their perception of sex bias among students in vo-ag and the community in general.

2) The decision of female university level students enrolled in agricultural education to pursue teaching production agriculture as a profession appears to be influenced by their perception of sex bias among students in vo-ag, parents, administrators and the community in general.

3) The job satisfaction of current female teachers of production agriculture may be influenced by their perception of sex bias among parents and employers of students.

4) The job satisfaction of current female teachers of production agriculture may not be as strongly influenced by the perception of sex bias among students, other teachers and administrators.

Implications

Interpretation of the findings and conclusions would suggest several implications.

Given a significant negative relationship between the perception of sex bias and desire to teach among potential teachers and an even stronger inverse relationship between the perception of sex bias and job satisfaction among women currently teaching, teacher educators might do well to address the issue of sex bias in the recruitment of female teachers of production agriculture. Although the success of females already teaching would indicate that women can teach vocational agriculture, females at the secondary and post-secondary levels may be discouraged from teaching by reports of prevalent sex bias. While teacher educators might consider raising the issue of sex bias in methods courses and in other settings, it would seem inappropriate to warn female students interested in teaching vo-ag that their work will be made difficult by inevitable resistance from the community. Steps can be taken to prevent problems in community acceptance and these positive strategies could be emphasized in teacher training programs.

Further, there is an evident need for in-service work to facilitate the acceptance of female agriculture teachers in the community. Since parental acceptance seems to be a critical factor in job satisfaction, strategies could be discussed that would help an incoming female vo-ag

teacher gain the approval of parents and other community members.

Need for Further Study

The following recommendations for further research are made in light of the findings of this study.

1) A more extensive study of female teachers of production agriculture could be conducted using in-depth interviews to obtain additional data on strategies for over-coming sex bias at the local level.
2) This study should be replicated in other states to provide further verification of the findings.
3) A parallel study involving potential female teachers and those females currently teaching in male-intensive trade and industrial programs could be conducted and results compared with the findings of this study.
4) Further development of the instruments utilized in this research would contribute to increased reliability and validity.
5) A comparable study of males in traditionally female vocational programs would provide further insight into the problem of sex bias and stereotyping in education.

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